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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	1,022.165	912.399	568.711	0.000	568.711	566.378	582.775	618.755	727.415	Continuing	Continuing
FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT	1,022.165	912.399	568.711	0.000	568.711	566.378	582.775	618.755	727.415	Continuing	Continuing

**A. Mission Description and Budget Item Justification**

This Program Element (PE) includes contractor efforts and government efforts to ensure that we are just not fielding a group of systems and black boxes to the soldier, rather we are fielding systems and black boxes that integrated together provide increased capability for the soldier that are supportable and trainable. The PE includes effort associated with System of System (SoS) engineering, SoS integration, SoS logistics, SoS training, SoS test, and SoS program/ business management. This project also includes the following government effort: Title 10 contract oversight, SoS engineering, SoS architecture, SoS test, modeling and simulation, analysis, government furnished equipment, and program management. This project includes support to other DOD agencies for joint programs and collaboration efforts with PEO Integration and associated Complementary Programs. Beginning in FY 2010, this Program Element includes all system engineering, test, logistics, training and program management cost associated with IBCT Increment 1 and IBCT Increment 2 development. Beginning in FY11 all fee is moved to appropriate funding Program Element.In FY09 system level PDRs and a Network PDR were conducted which culminated a successful SoS Preliminary Design Review (PDR) conducted in May 09. SoS PDR completed all engineering efforts associated with establishing the Future Combat Systems (FCS) functional baseline for 14 +1 systems. After the SoS PDR, the remaining FCS Brigade Combat Team (BCT) effort was terminated and additional system engineering efforts were conducted for the first two increments of IBCT capability (Increment 1 and Increment 2). Development for these increments included requirements decomposition and allocation, specification and interface development, architecture development, design and analysis, and verification/validation of prototypes.Contractor SoS Engineering - Conducted technical reviews, top level trade studies, and architectural design of IBCT Increment 1 and IBCT Increment 2, including requirements decomposition, requirements flow down to platforms, development of specifications, interface definitions, configuration management oversight, specialty engineering, and the analysis and verification of integrated force effectiveness. Contractor Program Management - Execute the full range of program management functions, including the development of processes and tools, Earned Value Management, Risk, software development, etc. used to manage the Army's brigade modernization incremental approach (to include over 600 subcontractors/partners) to achieve the SoS program requirements within the available dollars and schedules. Test and Evaluation - Includes contractor and government test and analysis to verify the performance of each increment. This work validates the specifications and verifies that the specifications meet the applicable requirements document Operational Requirements Document (ORD) or Capabilities Design Document (CDD) and operational and organizational requirements. Component and platform level developmental testing is included in the respective platform program elements. Contractor Logistics includes the development of the "factory to foxhole" products and services required to design, develop, assemble, integrate, and test the supportability processes. This includes: validating maneuver logistics; Performance Based Logistics (PBL), ensuring data collection for logistics decision support system software is adequate to support logistics modeling verification and validation; maximizing commonality of hardware and software to reduce the lifecycle costs and logistical footprint; provides integration of supportability including diagnostics functions and conducts logistics technical reviews at the system, vehicle, and component levels; increased Reliability Availability Maintainability Test (RAM-T) goals; and Pit-Stop Engineering designs for maintenance. Training - Includes contractor analysis to support incremental training and development of training capabilities associated with

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
2040: Research, Development, Test & Evaluation, Army		PE 0604661A: FCS Systems of Systems Engr & Program Mgmt			
BA 5: Development & Demonstration (SDD)					
Increment deliveries. Includes the design and development, engineering, integration, and testing of embedded training; unique training devices; associated training systems engineering; training products; Training Support Packages; and training system integration. This mission assures that the training system is designed as an integral part of the overall incremental design to meet program and KPP requirements. Due to termination of FCS MGVs, Class IV UAV, MULE-T and MULE C the embedded training requirement for FY10 and out is reduced to SUGV, Class 1 UAV and the ARV-A-L (UGV), sensors and the associated Common Controllers (CC); Battle Command capability; and Network Interface Kits (NIK) for IBCT INC1 and IBCT INC2. Government Support Costs-Includes funding for government personnel for labor, travel, training, supplies, and other support costs (support contractors, Automated Data Processing (ADP), communications, supplies, and equipment). Supports other services for Joint Programs, Multinational Project Arrangements, and collaborative efforts. Includes the procurement of Government Furnished Equipment/Items/Data (GFX) for Boeing. GFX is used when procurement through the Government is less expensive than through the contractor.					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	1,414.756	1,067.191	690.570	0.000	690.570
Current President's Budget	1,022.165	912.399	568.711	0.000	568.711
Total Adjustments	-392.591	-154.792	-121.859	0.000	-121.859
• Congressional General Reductions		-154.792			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	-353.041	0.000			
• SBIR/STTR Transfer	-39.550	0.000			
• Adjustments to Budget Years	0.000	0.000	-121.859	0.000	-121.859
Change Summary Explanation					
Change Summary Explanation: FY09: Congress approved reprogramming request for additional funds to the program's higher priority needsFY10: Congress reduced the program FY11: Program made a Work Breakdown Structure realignment to meet the Congressional request to have the contractor's fee spread to the individual Program Elements.					

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2011 Army								<b>DATE:</b> February 2010			
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604661A: <i>FCS Systems of Systems Engr &amp; Program Mgmt</i>				<b>PROJECT</b> FC2: <i>FCS SYSTEM OF SYSTEMS ENGR &amp; PROGRAM MGMT</i>			
<b>COST (\$ in Millions)</b>	<b>FY 2009 Actual</b>	<b>FY 2010 Estimate</b>	<b>FY 2011 Base Estimate</b>	<b>FY 2011 OCO Estimate</b>	<b>FY 2011 Total Estimate</b>	<b>FY 2012 Estimate</b>	<b>FY 2013 Estimate</b>	<b>FY 2014 Estimate</b>	<b>FY 2015 Estimate</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
FC2: <i>FCS SYSTEM OF SYSTEMS ENGR &amp; PROGRAM MGMT</i>	1,022.165	912.399	568.711	0.000	568.711	566.378	582.775	618.755	727.415	Continuing	Continuing
Quantity of RDT&E Articles											
<b><u>A. Mission Description and Budget Item Justification</u></b> Not applicable for this item.											
<b><u>B. Accomplishments/Planned Program (\$ in Millions)</u></b>											
							<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011 Base</b>	<b>FY 2011 OCO</b>	<b>FY 2011 Total</b>
Program #1  CONTRACTOR PROGRAM MANAGEMENT - Increment 1: Implement processes, models, tools & management structure to integrate all subcontractor partners into one team to meet cost, schedules, and technical performance requirements in the contract to include program overview, Earned Value Management, briefings, technology reviews, reports, program risk, subcontract management, data, operation management, contract management, procurement and acquisition management along with Small and Minority Business Integration, SDD Affordability/CAIV/ Life Cycle Management and development of program baseline & Integrated Master Schedule. In FY09 supported FCS Core and Common Spin Out; FY10 includes Program Management for the remainder of Increment 1 effort through LUT 10  <i>FY 2009 Accomplishments:</i> FY 2009  <i>FY 2010 Plans:</i> FY 2010							94.814	55.686	0.095	0.000	0.095

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2  CONTRACTOR PROGRAM MANAGEMENT - Increment 2: Implement processes, models, tools & management structure to integrate all subcontractor partners into one team to meet cost, schedules, and technical performance requirements in the contract to include program overview, Earned Value Management, briefings, technology reviews, reports, program risk, subcontract management, data, operation management, contract management, procurement and acquisition management along with Small and Minority Business Integration, SDD Affordability/CAIV/ Life Cycle Management and development of program baseline & Integrated Master Schedule. Increment 2 effort begins in FY10 and extends through MS C.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.000	166.511	104.154	0.000	104.154
Program #3		143.484	53.224	9.100	0.000	9.100

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
GOVERNMENT - SYSTEM ENGINEERING & PROGRAM MANAGEMENT - SYSTEM ENGINEERING - Increment 1: Participate and ensure the government and soldiers best interest/values are considered in the following: System of System (SoS) reviews, trade studies, architectural mgt, requirements decomposition, requirements flow down, development of specifications, interface definitions, configuration mgt oversight, specialty engineering, analysis and verification of integrated force effectiveness, Software, Risk, M&S, Simulation, Performance/Product/Producibility Assurance, Integration & Verification, Technology and Experimentation Management. In FY09 accomplished systems engineering and analysis for the function baseline for 14+1 systems at SoS PDR in May 09. IBCT Incr 1 planned, prepared & conducted TFT/FDT&E/LUT09 activities. FY10 includes system engineering and analysis effort required to support IBCT LUT 10 and IOTE testing. PROGRAM MANAGEMENT: Provide integrated program management (i.e. planning, directing, tools and controlling functions), for all development activities to include data and supplier management, program control, government training, procurement and contracts management, operations management for incremental BCTs and new combat vehicle development. Provide Congressional Title 10 oversight, cost analysis and management, budget development, justification and tracking, Earned Value Management, Integrated Master Schedule development and management, Complementary Program management and operations management associated with contractor management. Also includes TRADOC support for requirement analysis, AoA support, and Milestone reviews.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #4  GOVERNMENT - SYSTEM ENGINEERING & PROGRAM MANAGEMENT - SYSTEM ENGINEERING - Increment 2: Participate and ensure the government and soldiers best interest/values are considered in the following: System of System (SoS) reviews, trade studies, architectural mgt, requirements decomposition, rqmts flow down, development of specifications, interface definitions, configuration mgt oversight, specialty engineering, analysis and verification of integrated force effectiveness, Software, Risk, M&S, Simulation, Performance/Product/Producibility Assurance, Integration & Verification, Technology and Experimentation Management. FY10 & FY11 includes system engineering and analysis effort required to support the IBCT Incr 2 architecture & requirements development, system level CDRs analysis, and finally preparation for the IBCT Incr 2 CDR. PROGRAM MANAGEMENT: Provide integrated program management (i.e. planning, directing, tools and controlling functions), for all development activities to include data and supplier management, program control, government training, procurement and contracts management, operations management for incremental BCTs and new combat vehicle development. Provide Congressional Title 10 oversight, cost analysis and management, budget development, justification and tracking, Earned Value Management, Integrated Master Schedule development and management, Complementary Program management and operations management associated with contractor management. Also includes TRADOC support for requirement analysis, AoA support, and Milestone reviews.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010		0.000	68.187	87.012	0.000	87.012

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #5  CONTRACTOR SOS Engineering & Integration FY09: Conducted the SoS Preliminary Design Review (SoS PDR - May 09), Conducted Network PDR. Continued development and maturation of the SoS Architecture. Updated and maintained program technical baseline consisting of releasing the next version of the SoS Specification and Prime Item Development Specifications. Executed IMT1 in Jan 09 at WSMR with a total of 45 Soldiers from the I CAB and received User feedback on the WMI. Conducted Simulation Based Soldier Assessment (SBSA) in July 09 to evaluate WMI screens not included in IMT1. Managed execution of System Level Integrated Product Teams Preliminary Design Reviews (PDR). Updated the Integrated Analysis Plan and execute assessments in the areas of KPP achievability, MANPRINT, Manpower Estimate, Human Systems Integration, Safety, Information Assurance and force effectiveness for SoS PDR. Safety Assessment and MANPRINT analysis reports along with an update of the Programmatic NEPA Assessment and a Programmatic ESOH Evaluation will be completed for SO and core program. Updated, maintained and released the Design Concept Baseline and released the System of Systems/System Design Description. Completed adjudication of SO CDD & CPD along with continued maturation of SO technical baseline for integration of SO SoS TFT/FDT&E/ LUT and prepare for SO MS C in FY10.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010		189.373	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #6  CONTRACTOR SOS ENGINEERING & INTEGRATION FY 10 - IBCT INCREMENT 1: Conduct the Increment 1 delta CDR, conduct Industrial Capability Assessment for all major suppliers in support of PRR, and support MS C Decision review. Plan and conduct UGS IQT, develop, test and release SOSCOE Build 2.6 and 2.7 and conduct Battle Command NSQT, implement engineering changes to correct faults detected from FY 09 TFT/ FDT&E/LUT and conduct FY10 TFT/FDT&E/LUT.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.000	8.869	0.000	0.000	0.000
Program #7  CONTRACTOR SOS ENGINEERING & INTEGRATION FY 10 - IBCT INCREMENT 2: Manage the execution Integrated System Level Critical Design Reviews (CDRs for Class I Unmanned Air Vehicles (UAV),		0.000	42.120	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Common Controller, Small Unmanned Ground Vehicle (SUGV), ARV(L), Autonomous Navigation System (ANS), NIK and Network; and Build Readiness Checkpoint for Inc 2 Battle Command. Conduct Simulation Assessment to evaluate WMIs. Update the Integrated Analysis Plan and execute assessments in the areas of areas of KPP achievability, MANPRINT, Manpower Estimate, Human Systems Integration, Safety, Information Assurance and force effectiveness in support of the SoS CDR. Update Program NEPA Assessment and complete a Programmatic ESOH Evaluation. Conduct requirements decomposition for Incr 2.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO					
Program #8  CONTRACTOR SoS Engineering & Integration FY11 - IBCT INCREMENT 1: Complete engineering changes/ corrective actions identified from FY10 test cycle to support the FY11 IVT/TFT and FDT&E/IOT&E.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010	0.000	0.000	1.132	0.000	1.132

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #9		0.000	0.000	37.219	0.000	37.219
CONTRACTOR SoS Engineering & Integration FY11 - IBCT INCREMENT 2: Continue systems engineering architecture/decomposition of TRADOC's requirements and development of Inc 2 Performance Specification: Manage the integration of the Class I Unmanned Aerial Vehicles (UAV), Common Controller, Small Unmanned Ground Vehicle (SUGV), ARV-A (L), Autonomous Navigation System (ANS) and the Network. Complete the SoS Critical Design Review 3QFY11 and demonstrate ability to meet the required capabilities. Substantiate, via Integrated Platform/Network Analysis and requirements traceability, achievement of the Key Performance Parameters. Complete Human Systems Integration assessments to ensure the Soldier can effectively operate the provided systems in a safe and effective manner.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #10		15.626	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CONTRACTOR SoS TEST and M&S FY09 - Developed IMT1 Master Procedures Set. Began Preparation for the Test Infrastructure (HW, SW, Participants, and Facilities) to support IBCT Incr 1 LUT 10. Early planning to support SSEI development of Integrated phase. Completed Update to ITEP supports CR changes to FCS program. Provided contractor input to the TEMP update to include annexes for Spin Out Early to the IBCT. Supported the BCT SW Build 2 Early Distributed Qualification Test (B2E DSQT), Integrated Verification 1 Integrated Mission Test 1 (IV1 IMT1).  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #11  CONTRACTOR SoS TEST and M&S FY10 - IBCT Increment 1: Plan and execute qualification testing of the new form factor U/T-UGS, Range Extension Relay (RER) updated Network Integration Kit (NIK) - formerly B-kit, updated SUGV, and Class I Block. Develop detailed Test Plan for three Technical Field Tests (TFT) in a classified network environment. Support integration of Increment 1 SW and HW in support of the TFT. Conducts dry runs for record for TFT. Provide support to the FY10 FDTE and LUT.  FY 2009 Accomplishments: FY 2009		0.000	25.716	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #12		0.000	27.913	0.000	0.000	0.000
CONTRACTOR SoS TEST and M&S FY10 - IBCT Increment 2: - Initiate the development of the detailed test plan, test procedures, and test training plans for the Laboratory Based Maturation Assessment. Initiate the development of the detailed test plan, test procedures, and test training plans for the Field Based Maturation Assessment. Initiate the development of the detailed test plan, test procedures, and test training plans for the Technical Field Test A.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #13		0.000	0.000	36.938	0.000	36.938

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
CONTRACTOR SoS TEST and FY11 -Increment 2: Complete detailed planning of the qualification testing of the IBCT Increment 2 platforms. Complete detailed test planning for the IBCT Increment 2 Technical field Tests (TFT A and TFT B). Conduct Pre-Test Readiness Review for Technical Field Test A. Conduct Benchmarks and Checkouts for the Laboratory Based Maturation Assessment (LBMA). Conduct Benchmarks and Checkouts for the Field Based Maturation Assessment (FBMA).  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #14  GOVERNMENT - SYSTEM TEST & EVALUATION (STE) and M&S FY09 - MG V testing focused on the NLOS-C SDD prototype testing at YPG, WSMR and APG. This includes Firing Tests on P1, Automotive test on P3, Improved Mobility/RAM test on P4, E3, Safety, Mobility, Firing test on P5, Safety and RAM test on P6, and Reliability test on P7 as well as the continuation of the NLOS-C Firing Platform. NLOS-M Firing Platform and Proof testing continued as well as the continuation of MG V Top Deck Deconfliction/Co-site testing at EPG on the RSV and the NLOS-C. NLOS-C/M compartmentation testing continued as will Automate Fire Extinguisher System (AFES) testing at APG, MG V CBRN materials testing at DPG MG V Band track testing also continued at YPG and Armor development testing to include structure testing and coupons will occur at ARL/APG. HAS/APS also continued throughout FY09 as will the APS Countermeasure Munitions testing. MCS testing continued with		91.852	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
the firing of the MSC Firing Platform at APG, MCS Armament safety and qualification testing at APG and MCS Ammunition Compatibility testing. Supports Test ammunition requirements for all FCS firing and ammunition tests. DREN connectivity between the LSI and OTP SILs will continue. ATEC will again provide 42 MY SME support to the LSI and surge engineering support as required to support tests. Continued testing of armor recipes. Initiates Class IV UAV Army/Navy cooperative E3 testing. Funds the development and modifications of modeling and simulation test tools for future test events. These tools include test event design tools as well as test data collection capabilities. Additionally these tools include stimulators used to test FCS systems. Funds the operational and maintenance costs of the Common Control Nodes and WSMR and APG. These facilities are program test facilities used in support of system of system tests events. In July 2009 all MGTV and NLOS-LS test activity were stopped except for APS related activities.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #15		0.000	0.000	0.000	0.000	0.000
GOVERNMENT - SYSTEM TEST & EVALUATION (STE) and M&S FY09 Continued - Continued funding of the Cross Command Collaboration Effort (3CE). Developed, integrated, delivered and supported the M&S federation required to execute IBCT Increment 1 FDT&E and Situational Training Exercises (STXs), providing the larger brigade scale context for the soldiers participating in these events. Performed requirements analysis						

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APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)		R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt		PROJECT FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
and design, developed, and integrated technologies and data related to FCS Program LUT3 and user needs, with emphasis on IP2. Continued enhancements of the Communications Effects Server (CES) to support Quality of Service TRL6 testing. Provided funding for FCS unique enhancements of GFX M&S software, including: OneSAF FCS Unit-level behavior modeling, Tactical Network Gateway, FCS Battle Command stimulation, ability to command and control the SAF at the Company and Battalion levels; updates to geospatial data products required for simulations in order to accurately represent the WSMR and Ft. Bliss terrain associated with FY10 test events; and modifications to MATREX and NVIG Tool Set to adapt to additional required federation interactions necessary to complete FCS operational threads in simulation. Continued the integration of representations of insurgents and the impact of urban terrain, building interiors, and competing urban radio frequencies into One SAF and the CES.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #16  GOVERNMENT - SYSTEM TEST & EVALUATION (STE) and M&S FY10 - IBCT Increment 1: Conduct a simulation based test in support of Incr 1 . Provides for range support for IBCT Increment 1 platform qualification testing, three IBCT Increment 1 Technical Field Tests and the LUT 10. Provide SME support to the contractor and surge engineering support as required to support specific IBCT Increment 1 test events. Funds the		0.000	83.534	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
development and modification of modeling and simulation test tools for future test events. These tools include test event design tools as well as test data collection capabilities. Funds the operational and maintenance and hardware (HW) refresh costs of the Common Control Nodes and WSMR and APG. Funds for infrastructure and test facilities that will support the IBCT Increment 1 testing. Funds DREN connectivity to selected contractor sites. Transitions from funding of the Cross Command Collaboration Effort (3CE) to establish the Army Acquisition M&S Enterprise Solution (AAMSES) to support the new Army Modernization strategy. AAMSES will provide the required capability to transition overarching M&S development and integration responsibility from the contractor to the Government, and provide for a sustainable simulation environment to allow soldiers to execute and evaluate modernization capabilities in an operationally relevant and realistic synthetic environment. Continues funding of modifications to M&S GFX software to accurately represent Increment 1 systems, networks and Battle Command. Funds the execution of 6 M&S Integration Events in the critical path leading up to the FY10 TFT and LUT events. Starts development of Brigade-scale simulation environment that will be required to support the FY11 IOT&E, to include comparative evaluation of IBCTs with and without Increment 1 material in a validated and realistic operational and threat environment.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #17		0.000	20.238	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
GOVERNMENT - SYSTEM TEST & EVALUATION (STE) and M&S FY10 - IBCT Increment 2: Begins transition of Increment 2 M&S being developed by the contractor to the Government. Verifies and validates WNW waveform models that will be used to evaluate the Increment 2 network performance at Brigade and higher scale in FY11 and beyond. Continues funding of modifications to M&S GFX software to accurately represent Increment 2 systems, networks and Battle Command. Establishes Government capability to execute top-level M&S federation integration, execution and support to allow soldiers to exercise and evaluate Increment 2 systems, networks and Battle Command software in an operationally relevant and realistic environment.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #18		0.000	0.000	76.365	0.000	76.365
GOVERNMENT - SYSTEM TEST & EVALUATION (STE) and M&S FY11 - IBCT Increment 1: Funds the planning and conduct Increment 1 Initial Operational Test to include range support, threat, data collection and analysis. Continue to fund SME support to the contractor. Detail plan range support for production verification testing of IBCT Increment 1 systems. Funds overarching M&S integration activity within the Government, to include responsibility for integration of M&S GFX and VV&A in support of Army-led Increment 1 comparative IOT&E. Provides operationally relevant and realistic brigade and above scale environment to allow a single live CAB to conduct IOT&E operations in coordination with soldiers controlling two additional CABs, the						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Brigade headquarters, and elements of the above Brigade force in simulation environment. Provides funding for enhancements of OneSAF to support: adaptation to incremental releases of Integrated Battle Command/Network software; updated representations of Increments 1 equipment; and updated unit-level representations of Incr 1 IBCT units. Funds the AAMSES established in FY10 to deliver common integrated M&S environment to support FY11 and beyond Increment 2 events.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #19  GOVERNMENT - SYSTEM TEST & EVALUATION (STE) and M&S FY11 - IBCT Increment 2: Provide SME support to the contractor and surge engineering support as required to support specific Increment 2 test events. Provides range support and threat representation to support contractor technical field test. Funds the development and modification of modeling and simulation test tools for future test events. These tools include test event design tools as well as test data collection capabilities. Funds the operational and maintenance and hardware (HW) refresh costs of the Common Control Nodes and WSMR and APG. Funds for infrastructure and test facilities that will support the Increment 2 testing. Funds DREN connectivity to selected contractor sites. Provides funding for enhancements of OneSAF to support: adaptation to incremental releases of Integrated Battle Command/Network software; updated representations of Increment 2 equipment; and updated unit-level		0.000	0.000	47.148	0.000	47.148

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
representations of Increment 2 units. Funds overarching M&S integration activity within the Government, to include responsibility for integration of M&S GFX and VV&A in support of Army-led major program events. Completes transition of lifecycle responsibility and product management of the CES from the prime contractor to the Government, to support Army BCT Modernization network analysis, assessment and test. Continue platform simulation development supporting: BCS and Network Software integration and test; Brigade level integration and test; design and analysis trade studies; technology readiness demonstrations; laboratory and field test events; and soldier training.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO					
Program #20  CONTRACTOR TRAINING Specs and Products FY09 - Continued development of individual and collective tasks analyses to support the Embedded Training design and content. Developed interface requirement specifications and began preparation of interface design specifications. Updated and Delivered: Training Management Plan, Training Data Products Report, Training Support Packages, Training Facilities Survey Report. Continued to develop and update Embedded Training capability and products for the FCS program: Training (Instructional) Support Packages (TSPs), Interactive Multi-media Instruction (IMI), and Embedded Training software. Completed Platform PDR and SoSPDR architecture products. Delivered Individual Task Lists in	18.919	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
support of System PDRs (CI IV UAS, MGVS, CC, A/GPCS). Delivered Final Task Analysis Report and TSP Development Plan in support of System CDRs (CI IV UAS, ANS, MULE, CC, A/GPCS.). Continued Key Performance Parameter (KPP) #6 (Training) requirements analysis development, and execution. Continued integration of Training software with Warfighter Machine Interface (WMI). Delivered Training Common Components (TCC) Build 2 Engineering Release 1 (Apr 09) and TCC Build 2 Engineering Release 3 (Sep 09). Modified existing Training Aids, Devices, Simulators and Simulations (TADSS) such as Close Combat Tactical Trainer (CCTT), Synthetic Environment Core (SE Core), Gaming, and other TADSS as required to provide continuity and training assets to the IBCT. In conjunction with MGVS termination, Embedded Training efforts for MGVS were terminated in July 2009.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #21		0.000	59.096	0.000	0.000	0.000
CONTRACTOR TRAINING Specs and Products FY10 - IBCT INCREMENT 2: Design and develop initial increment of Embedded Training capability for Inc 2 common controller. Develop Interactive Multimedia Instruction (IMIs) and Graphic Training Aids (GTAs) to support individual training. Update IBCT Inc 2 Training Support Packages (TSPs) as basis to provide individual training at Army Schools during ARFORGEN. Provide embedded MILES-based live training "E Bullets" based live training supported on the Common Controller (CC).						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Initiate development of embedded live, virtual and constructive capabilities of ARV-A(L) operator tasks on CC. Update Current Force TADSS, such as CCTT, SE Core, Gaming and other TADSS necessary to provide continuity to the IBCT.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #22  CONTRACTOR TRAINING Specs and Products FY11 - IBCT INCREMENT 2: Continue development of IBCT Inc 2 capabilities including the delivery of initial Embedded Training capabilities for Inc 2 systems utilizing GFX Training Common Components (TCCs). Support design and test requirements of Contractor and Government. Develop Inc 2 Phase I Build capabilities integrated with Warfighter Machine Interfaces (WMI). Provide iterative updates to TCC capabilities hosted on SoSCOE. Update Current Force TADSS, such as CCTT, SE Core, Gaming and other TADSS as necessary to provide continuity to the IBCT.  FY 2009 Accomplishments: FY 2009		0.000	0.000	25.856	0.000	25.856

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #23		5.990	0.000	0.000	0.000	0.000
CONTRACTOR - SUPPORTABILITY / LOGISTICS FY09 - Provided test support for equipment testing and demonstrations for SoS supportability performance verification. Validated Maneuver Sustainment, PBL, and other applicable support concepts during testing, demonstrations, and validations. Ensure sensor collection of data for logistics decision support system software is adequate to support logistics modeling verification and validation efforts as well as operational PBL. Ensured Supportability architectures and requirements are implemented during design, development, fabrication and test of Vehicle Systems to achieve Transportability, Deployability and Operational Availability. Conducted Logistics Planning, Modeling and Simulations to mitigate risk and verify reductions in FCS Logistics Footprint while increasing Readiness & Availability. Identified the logistics test requirements for the soldier or warfighter level health tests and the requirements for integration testing with multiple systems and platforms as well as the system of system level testing. Provided and administer a TSP capable of sustaining test and evaluation efforts. Planned for the conduct of maintenance and provision of repair parts, tools, test fixtures, and facilities. Provided technical support to all logistics 1) demonstrations and simulations and 2) system verification, validation, and integration tests to ensure that requirements for RAM-T and supportability are met. Provided support for Verification & Validation of IETMs, prognostics diagnostic equipment, data collection, and instrumentation. Provided analysis develop requirements for integration and test of Current Force spiral testing. Maintenance Plan, Readiness report to SU, Sustainment request Handling, Class (I, III,V,IX) supply & Distribution Status. In July 2009 MGV supportability efforts were terminated.						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #24		0.000	3.965	0.000	0.000	0.000
CONTRACTOR - SUPPORTABILITY / LOGISTICS FY10 - IBCT INCREMENT 1: Provide test support for equipment testing and demonstrations for Increment 1 systems supportability performance verification. Validate Maneuver Sustainment and other applicable support concepts during testing, demonstrations, and validations. Ensure sensor collection of data for logistics decision support system software is adequate to support logistics modeling verification and validation efforts. Complete integration of logistics requirements for the IBCT Increment 1 systems. Ensure Supportability architectures and requirements are implemented during design, development, fabrication and test of IBCT Increment 1 platforms/systems to achieve Transportability, Deployability and Operational Availability. Complete data products for supportability planning, PBL planning, IETM development, Level of Repair Analysis, Logistics Management Information (LMI) Logistics Demonstrations, UID Implementation, Core Logistics Analysis and Source of Repair Analysis and diagnostic models. Complete ILS assessments to ensure that requirements for RAM-T and supportability are met. Provide support for Logistics Demonstration Planning and readiness reviews, 4QFY10						
FY 2009 Accomplishments: FY 2009						

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010					
FY 2011 Base Plans: FY 2011 Base					
FY 2011 OCO Plans: FY 2011 OCO					
Program #25  CONTRACTOR - SUPPORTABILITY / LOGISTICS FY10 - IBCT INCREMENT 2: Define, develop & integrate requirements for the IBCT Increment 2 platforms and systems. Ensure Supportability architectures and requirements are implemented during design, development, fabrication and test of IBCT Increment 2 and platforms/systems to achieve Transportability, Deployability and Operational Availability. Plan for , review and provide CDR data products for Increment 2 systems for supportability planning, PBL planning, IETM development, Level of Repair Analysis, Logistics Management Information (LMI) Logistics Demonstrations, UID Implementation, Core Logistics Analysis and Source of Repair Analysis and diagnostic models. Identify the logistics test requirements for the soldier or warfighter level health tests and the requirements for integration testing with multiple systems and platforms as well as the system of system level testing. Plan, prepare for and complete CDR ILS assessments for Increment 2 systems to ensure that requirements for RAM-T and supportability are met. Provide Logistics Demonstration Plan.	0.000	22.945	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009					
FY 2010 Plans: FY 2010					

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #26  CONTRACTOR - SUPPORTABILITY / LOGISTICS FY11- IBCT INCREMENT 2: Define, develop & integrate requirements for the IBCT Increment 2 platforms and systems. Ensure Supportability architectures and requirements are implemented during design, development, fabrication and test of IBCT Increment 2 platforms/ systems to achieve Transportability, Deployability and Operational Availability. Plan for , review and provide SoS CDR and IQT data products for supportability planning, PBL planning, IETM development, Level of Repair Analysis, Logistics Management Information (LMI) Logistics Demonstrations, UID Implementation, Core Logistics Analysis and Source of Repair Analysis and diagnostic models. Identify the logistics test requirements for the soldier or warfighter level health tests, and the requirements for integration testing with multiple systems and platforms as well as the system of system level testing. Plan, prepare for and complete CDR and IQT ILS assessments to ensure that requirements for RAM-T and supportability are met. Provide Logistics Demonstration Plan.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base		0.000	0.000	21.060	0.000	21.060

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #27  CONTRACTOR FEE - IBCT Increment 1: This includes both the Boeing incentive and fixed fee. Beginning in FY11 fee is included in each PE. Fee is calculated only on new effort not cost overruns.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		320.707	21.364	0.123	0.000	0.123
Program #28  CONTRACTOR FEE - IBCT Increment 2: This includes both the Boeing incentive and fixed fee. Beginning in FY11 fee is included in each PE. Fee is calculated only on new effort not cost overruns.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010		0.000	100.052	22.523	0.000	22.523

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #29  Government Other - IBCT Increment 1: This includes support to both PM and non-PM government support offices that provide technical expertise (PEO C3T, TRADOC, UAMBL, ARL, FFID, etc). This also includes other technical support contracts like the Sandia Labs - FCS Integrated Support Team (FIST), (MITRE), Software Steering Committee from University South California and University of Maryland which also reviews Boeing software performance, logistics products, network requirements and capabilities. It includes all electronic hardware and software required for government personnel (computers, Blackberry, software, internet and ACE software agreements). CIO and Security management within the PM. Tech base insertion into the FCS program to reduce program TRL Risk. TRADOC support of analysis to support spinout and the future new combat vehicle system.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		112.013	32.473	10.204	0.000	10.204

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #30  Government Other - IBCT Increment 2: This includes support to both PM and non-PM government support offices that provide technical expertise (PEO C3T, TRADOC, UAMBL, ARL, FFID, etc). This also includes other technical support contracts like the Sandia Labs - FCS Integrated Support Team (FIST), (MITRE), Software Steering Committee from University South California and University of Maryland which also reviews Boeing software performance, logistics products, network requirements and capabilities. It includes all electronic hardware and software required for government personnel (computers, Blackberry, software, internet and ACE software agreements). CIO and Security management within the PM. Tech base insertion into the FCS program to reduce program TRL Risk. TRADOC support of analysis to support spinout and the future new combat vehicle system.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.000	69.160	68.865	0.000	68.865
Program #31  GOVERNMENT GFX- Increment 1 -FY09 - FY11 - - Deliver Increment 2, Phase 1 build early to IBCT Training IPT in Jul 10. Provided M2, MK19 and the M240 ammunition required for LSI testing Support Model and SIM updates to support JEFX08 and Experiment 2.		29.387	2.309	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #32		0.000	10.104	17.342	0.000	17.342
GOVERNMENT GFX- Increment 2 -FY09 - FY11 - Continue Technical Management Integration support throughout the development of the Training Common Components (TCC) efforts (OneSAF, OneTESS, Common Training Istrumentation Architecture and SE Core). SMEs develop strategies to transition TCCs into Warfighter Machine Interface (WMI) and Battle Commandsoftware, Deliver TCC Increment 2, Phase 1 in Jul 10. Continue development of TCC Software Architecture and Software for Increment 2, Phase II. Deliver Increment 2, Phase II in 4QFY10. Fully integrate TCCs with Warfighter Machine Interfaces and applications running as a single SOSCOE application. Continue Live/Virtual/Constructive interoperability between Live and Constructive training capabilities (AAR, TM, EM, LTTES, DL) for an integrated WMI solution. Provide Government oversight of additional TCC construction and Live/Constructive Integration.						
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #33  IBCT Platform A-Kit Development FY10 - IBCT Increment 1: Redesign/design A-Kits with new Legacy equipment reflecting space claim of current production configurations for the 1151 and 1165 HMMWV variants. Create Technical Data packages for the A-Kits with installation drawings. Create installation instructions for both HMMWV variants. Perform additional qualification testing. Install A-Kit, Legacy equipment and support B-Kit installation on HMMWV test vehicles. Support all LSI/government testing. Update/create all logistics documentation needed to support the A-Kit. Supports the integration of the IBCT enhanced capabilities into MRAP variants.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO		0.000	3.810	0.000	0.000	0.000
Program #34		0.000	0.000	3.575	0.000	3.575

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt	PROJECT FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
IBCT Platform A-Kit Development FY11 - IBCT Increment 2: Provides for the integration of IBCT enhanced capabilities (ICS, GPCS, GMR) into the MRAP and HMMWV. Funds the start of development for the integration kit, procurement of material and labor to build prototype A- kits and modify the Stryker to accept the ICS and GPCS. Also includes development of any training materials as well as supportability and fielding plans.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						
Program #35  Termination Costs - Cost for Special Termination FCS (BCT) SoS engineering effort.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base		0.000	9.576	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt				PROJECT FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT			
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
FY 2011 OCO Plans: FY 2011 OCO											
Program #36 Small Business Innovative Research/Small Business Technology Transfer Programs.  FY 2009 Accomplishments: FY 2009  FY 2010 Plans: FY 2010  FY 2011 Base Plans: FY 2011 Base  FY 2011 OCO Plans: FY 2011 OCO						0.000	25.547	0.000	0.000	0.000	
Accomplishments/Planned Programs Subtotals						1,022.165	912.399	568.711	0.000	568.711	
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #1: 0604660A FCS MG V Manned Ground Vehicles & Common Grd Vehicle Components	760.744	275.116	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1,035.860
• Ord. #2: 0604662A FCS Reconnaissance (UAV) Platforms	55.923	75.107	50.304	0.000	50.304	12.058	4.180	0.000	0.000	0	197.572
	104.571	124.962	249.948	0.000	249.948	98.737	25.368	0.000	0.000	0	603.586

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C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #3: 0604663A FCS Unmanned Ground Vehicles											
• Ord. #4: 0604664A FCS Unattended Ground Sensors	20.135	26.778	7.515	0.000	7.515	1.071	1.071	0.000	0.000	0	56.570
• Ord. #5: 0604665A FCS Sustainment & Training R&D	819.721	655.745	610.389	0.000	610.389	523.580	366.647	253.810	258.367	0	3,488.259
• Ord. #6: 0604646A Non Line of Sight - Launch System	253.684	91.223	81.247	0.000	81.247	58.718	27.418	0.000	0.000	0	512.290
• Ord. #7: 0604647A Non Line of Sight - Cannon	87.038	47.964	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	135.002
• Ord. #8: 0604666A FCS Spin Out Technology/Capability Insertion	122.788	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	122.788
• Ord. #9: WTCV G86100 FCS Core Program	154.127	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	154.127
• Ord. #10: WTCV G86200 FCS Spin Out Program	67.268	326.909	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	394.177
• Ord. #11: 0605625A Manned Gound Vehicles	0.000	79.583	934.366	0.000	934.366	1,882.839	2,242.756	1,375.128	744.771	Continuing	Continuing
• Ord. #12: WTCV G86000 Ground Combat Vehicle (GCV)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	98.030	778.220	Continuing	Continuing
• Ord. #13: ACFT A00015 BCT Unmanned Aerial Veh (UAVs) Incr 1	0.000	0.000	44.206	0.000	44.206	40.216	12.770	3.718	1.850	Continuing	Continuing
• Ord. #14: ACFT A00016 BCT Unmanned Aerial Veh (UAVs) Incr 2	0.000	0.000	0.000	0.000	0.000	2.141	85.345	90.245	92.686	Continuing	Continuing
• Ord. #15: OPA B00001 BCT Unattended Ground Sensor	0.000	0.000	29.718	0.000	29.718	60.578	9.582	1.544	1.328	Continuing	Continuing
• Ord. #16: OPA B00004 BCT Unattended Ground Sensor Incr 2	0.000	0.000	0.000	0.000	0.000	19.093	87.478	96.172	86.259	Continuing	Continuing
	0.000	0.000	176.543	0.000	176.543	192.632	20.619	0.317	0.187	Continuing	Continuing

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)				R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt				PROJECT FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• Ord. #17: OPA B00002 BCT Network											
• Ord. #18: OPA B00003 BCT Network Incr 2	0.000	0.000	0.000	0.000	0.000	81.277	301.864	454.480	431.835	Continuing	Continuing
• Ord. #19: OPA F00001 BCT Unmanned Ground Vehicle	0.000	0.000	20.046	0.000	20.046	42.703	6.002	2.288	1.870	Continuing	Continuing
• Ord. #20: OPA F00002 BCT Unmanned Ground Vehicle Incr 2	0.000	0.000	0.000	0.000	0.000	373.193	710.680	676.230	711.940	Continuing	Continuing
• Ord. #21: OPA G80001 BCT Training/Logistics/Management	0.000	0.000	61.581	0.000	61.581	12.178	94.491	68.033	50.468	Continuing	Continuing
• Ord. #22: OPA G00002 BCT Training/Logistics/Management Incr 2	0.000	0.000	0.000	0.000	0.000	75.069	387.173	396.593	446.806	Continuing	Continuing
• Ord. #23: MSLS C64501 BCT NLOS-LS Incr 1	0.000	0.000	350.574	0.000	350.574	758.657	112.115	0.000	0.000	0	1,221.346
• Ord. #24: MSLS C64601 BCT NLOS-LS Incr 2	0.000	0.000	0.000	0.000	0.000	0.000	605.192	679.078	579.210	Continuing	Continuing
D. Acquisition Strategy											
A 23 June 2009 Acquisition Decision Memorandum (ADM) directed the cancellation of the FCS (BCT) acquisition program. It also instructed the Army to transition to an Army modernization plan consisting of a number of integrated acquisition programs. At that time, the SO E-IBCT was designated a pre-MDAP, with a Milestone C decision scheduled for the first quarter FY2010. A follow-on ADM was issued 9 July 2009. In it, the Army was directed to continue efforts to improve the brigades beyond the Early Infantry Brigade Combat Team acquisition until a standalone program(s) is defined later in 2010. An Army BCT Modernization Defense Acquisition Board (DAB) was then held on October 16, 2009 to review the Army's plans for the post-Future Combat Systems efforts and confirm the Army brigade modernization acquisition plans were consistent with the Secretary of Defense's guidance. An ADM issued after this DAB stated: "The approach, for Increment 1 (Early-Infantry Brigade Combat Team (E-IBCT)) and the Ground Combat Vehicle(GCV) effort, is consistent with the Secretary's guidance and each is being positioned for more in-depth review and acquisition decisions later in 2009." The Increment 1 E-IBCT Milestone C took place 22 December 2009 and was approved in an ADM dated 24 December 2009. The Program Executive Officer-Integration (PEO-I) has modified the existing contract to be compliant with the forementioned ADMs. This budget justification reflects the Milestone C approved Increment 1 (E-IBCT) program and the follow-on IBCT modernization program planned by the Army.											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army		DATE: February 2010
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>	<b>R-1 ITEM NOMENCLATURE</b> PE 0604661A: <i>FCS Systems of Systems Engr &amp; Program Mgmt</i>	<b>PROJECT</b> FC2: <i>FCS SYSTEM OF SYSTEMS ENGR &amp; PROGRAM MGMT</i>
<b>E. Performance Metrics</b> Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)						R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt				PROJECT FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT				
Product Development (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Contractor SEPM	C	The Boeing Company- ST. LOUIS MO, see remark 4	0.000	222.197		104.249		0.000		104.249	Continuing	Continuing	0	
Contractor System Requirements and Integration	C	The Boeing Company- ST. LOUIS MO, see remark 4	0.000	50.989		38.351		0.000		38.351	Continuing	Continuing	0	
Contractor Training Products	C	The Boeing Company- ST. LOUIS MO, see remarks 1-4	0.000	59.096		25.856		0.000		25.856	Continuing	Continuing	0	
Contract Fee	C	The Boeing Company- ST. LOUIS MO	0.000	121.416		22.646		0.000		22.646	Continuing	Continuing	0	
Contractor Supportability/ Log	C	The Boeing Company- ST. LOUIS MO	0.000	26.910		21.060		0.000		21.060	Continuing	Continuing	0	
Contractor IBCT Platform A-Kit Development	C	The Boeing Company - ST. Louis MO	0.000	3.810		3.575		0.000		3.575	Continuing	Continuing	0	
Subtotal			0.000	484.418		215.737		0.000		215.737			0.000	

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>											<b>DATE:</b> February 2010		
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604661A: <i>FCS Systems of Systems Engr &amp; Program Mgmt</i>				<b>PROJECT</b> FC2: <i>FCS SYSTEM OF SYSTEMS ENGR &amp; PROGRAM MGMT</i>					
<b>Product Development (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
<b>Remarks</b> Remark 1: Subcontractor: Computer Science Corp. Federal Sector Defense Group, Fsls Church, VA. Remark 2: Subcontractor: Dynamics Research Corp. Systems Division, Andover, MD. Remark 3: Subcontractor: Northrop Grumman, Info Tech, Def Enterprise Solutions Div, Mclean, VA. Remark 4: Subcontractor: SAIC Corp., San Diego, CA													
<b>Support (\$ in Millions)</b>													
				<b>FY 2010</b>		<b>FY 2011 Base</b>		<b>FY 2011 OCO</b>		<b>FY 2011 Total</b>			
<b>Cost Category Item</b>	<b>Contract Method &amp; Type</b>	<b>Performing Activity &amp; Location</b>	<b>Total Prior Years Cost</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Award Date</b>	<b>Cost</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	<b>Target Value of Contract</b>
Government SEPM	C	PM FCS(BCT) - St Louis MO	0.000	121.411		96.112		0.000		96.112	Continuing	Continuing	0
Government GFX	C	PM FCS(BCT) - St Louis MO	0.000	12.413		17.342		0.000		17.342	Continuing	Continuing	0
Government - Other Support	C	PM FCS(BCT) St. Louis, MO	0.000	101.633		79.069		0.000		79.069	Continuing	Continuing	0
SBIR/STTR	C	OSD Location could not be determined.	0.000	25.547		0.000		0.000		0.000	Continuing	Continuing	0
<b>Subtotal</b>			0.000	261.004		192.523		0.000		192.523			0.000
<b>Remarks</b>													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)					R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt					PROJECT FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT				
Test and Evaluation (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Contractor - SoS Test	C	The Boeing Company - St. Louis MO	0.000	53.629		36.938		0.000		36.938	Continuing	Continuing	0	
Government STE and M&S	C	PM FCS(BCT) St. Louis, MO , see remarks 1-3	0.000	103.772		123.513		0.000		123.513	Continuing	Continuing	0	
Subtotal			0.000	157.401		160.451		0.000		160.451			0.000	
Remarks														
Remark 1. Subcontractor, Netversant Co., Baltimore, MDRemark 2. Subcontractor, 3D Research, Huntsville, ALRemark 3. Subcontractor, Jacobs/Sverdrup, Aberdeen, MD														
Management Services (\$ in Millions)														
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract	
Special Termination	C	The Boeing Company St. Louis, MO	0.000	9.576		0.000		0.000		0.000	Continuing	Continuing	0	
Subtotal			0.000	9.576		0.000		0.000		0.000			0.000	
Remarks														

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<b>Exhibit R-3, RDT&amp;E Project Cost Analysis: PB 2011 Army</b>							<b>DATE:</b> February 2010											
<b>APPROPRIATION/BUDGET ACTIVITY</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> BA 5: <i>Development &amp; Demonstration (SDD)</i>				<b>R-1 ITEM NOMENCLATURE</b> PE 0604661A: <i>FCS Systems of Systems Engr &amp; Program Mgmt</i>			<b>PROJECT</b> FC2: <i>FCS SYSTEM OF SYSTEMS ENGR &amp; PROGRAM MGMT</i>											
<div style="display: flex; justify-content: space-between;"> <div style="width: 25%;"></div> <div style="width: 20%; text-align: center;"> <b>Total Prior Years Cost</b> </div> <div style="width: 10%; text-align: center;"> <b>FY 2010</b> </div> <div style="width: 10%; text-align: center;"> <b>FY 2011 Base</b> </div> <div style="width: 10%; text-align: center;"> <b>FY 2011 OCO</b> </div> <div style="width: 10%; text-align: center;"> <b>FY 2011 Total</b> </div> <div style="width: 10%; text-align: center;"> <b>Cost To Complete</b> </div> <div style="width: 10%; text-align: center;"> <b>Total Cost</b> </div> <div style="width: 10%; text-align: center;"> <b>Target Value of Contract</b> </div> </div> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 25%; text-align: right;"><b>Project Cost Totals</b></td> <td style="width: 20%; text-align: center;">0.000</td> <td style="width: 10%; text-align: center;">912.399</td> <td style="width: 10%; text-align: center;">568.711</td> <td style="width: 10%; text-align: center;">0.000</td> <td style="width: 10%; text-align: center;">568.711</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">0.000</td> </tr> </table>										<b>Project Cost Totals</b>	0.000	912.399	568.711	0.000	568.711			0.000
<b>Project Cost Totals</b>	0.000	912.399	568.711	0.000	568.711			0.000										
<b>Remarks</b>																		

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**Exhibit R-4, RDT&E Schedule Profile: PB 2011 Army**

**DATE:** February 2010**APPROPRIATION/BUDGET ACTIVITY**

2040: *Research, Development, Test & Evaluation, Army*  
BA 5: *Development & Demonstration (SDD)*

## R-1 ITEM NOMENCLATURE

PE 0604661A: *FCS Systems of Systems Engr & Program Mgmt*

## PROJECT

FC2: FCS SYSTEM OF SYSTEMS ENGR &amp; PROGRAM MGMT

	<b>FY 2009</b>				<b>FY 2010</b>				<b>FY 2011</b>				<b>FY 2012</b>				<b>FY 2013</b>				<b>FY 2014</b>				<b>FY 2015</b>			
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Increment 1 Total Program Tasks			#	#	#	#	#	#	#	#	#																	
Incr 1 Limited User Test FY 09			#																									
Incr 1 STX / FDT&E / LUT 10						#	#																					
Incr 1 Milestone C				#																								
Incr 1 Production Contract Award					#																							
Incr 1 Production Delivery							#	#	#	#																		
Incr 1 Initial Operational Test & Evaluation											#																	
Incr 1 First Unit Equipped											#																	
Incr 1 Initial Operational Capability													#															
Increment 2 Total Program Tasks										#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	
Incr 2 CDR										#																		
Incr 2 FDT&E / STX / LUT 13														#	#													
Incr 2 Milestone C																#												
Incr 2 Initial Operational Capability																									#			

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Army			DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 5: Development & Demonstration (SDD)	R-1 ITEM NOMENCLATURE PE 0604661A: FCS Systems of Systems Engr & Program Mgmt	PROJECT FC2: FCS SYSTEM OF SYSTEMS ENGR & PROGRAM MGMT		
Schedule Details				
	Start		End	
Event	Quarter	Year	Quarter	Year
Increment 1 Total Program Tasks	3	2009	3	2011
Incr 1 Limited User Test FY 09	3	2009	3	2009
Incr 1 STX / FDT&E / LUT 10	2	2010	3	2010
Incr 1 Milestone C	4	2009	4	2009
Incr 1 Production Contract Award	1	2010	1	2010
Incr 1 Production Delivery	3	2010	2	2011
Incr 1 Initial Operational Test & Evaluation	3	2011	3	2011
Incr 1 First Unit Equipped	3	2011	3	2011
Incr 1 Initial Operational Capability	1	2012	1	2012
Increment 2 Total Program Tasks	2	2011	2	2015
Incr 2 CDR	2	2011	2	2011
Incr 2 FDT&E / STX / LUT 13	3	2012	4	2012
Incr 2 Milestone C	2	2013	2	2013
Incr 2 Initial Operational Capability	2	2015	2	2015

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